

1 What is claimed is:

2 1. A method for mapping objects onto a lightweight directory access protocol
3 repository, comprising:

4 requesting that an object be stored in a lightweight directory access
5 protocol ("LDAP") repository, wherein the object includes attributes and is
6 used in an object-oriented programming application;

7 retrieving a list of persistent attributes from the object, wherein the
8 persistent attributes are a subset of the attributes and wherein the persistent
9 attributes each comprise a persistent attribute value;

10 determining a path, wherein the path identifies a location in the
11 LDAP repository;

12 retrieving the persistent attribute values from the object; and

13 storing the object in the LDAP repository so that the persistent
14 attributes are stored in a format that is useable by applications other than the
15 object-oriented programming application.

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17 2. The method of claim 1, wherein storing the object in the LDAP repository
18 comprises:

19 mapping the persistent attributes to LDAP attributes;

20 passing the persistent attribute values to the LDAP repository;

21 storing the persistent attribute values in the LDAP attributes at the
22 path based on the mapping.

23
24 3. The method of claim 2, wherein the persistent attributes each have a name
25 and wherein mapping the persistent attributes to LDAP attributes comprises adding
26 a prefix to the persistent attribute name.

27
28 4. The method of claim 3, wherein the prefix identifies the object-oriented
29 programming application and an organization.

30
31 5. The method of claim 2, wherein the persistent attribute values are passed to
32 the LDAP repository as an LDAP object comprising the LDAP attributes and the
33 persistent attribute values.

- 1 6. The method of claim 1, wherein the object-oriented programming
2 application has a name and the object has a name and wherein the path includes the
3 object-oriented programming application name, a container name and the object
4 name.
5
- 6 7. The method of claim 1, wherein the object represents one of the following: a
7 user, a node, a node group, a role or a tool.
8
- 9 8. The method of claim 1, wherein the objects are Java objects.
10
- 11 9. The method of claim 1, wherein the object-oriented programming
12 application is implemented in Java.
13
- 14 10. The method of claim 9, wherein the persistent attribute values are retrieved
15 from the object using Java reflection.
16
- 17 11. A method for retrieving objects mapped onto a lightweight directory access
18 protocol repository, comprising:
19 requesting that an object be retrieved from a lightweight directory
20 access protocol ("LDAP") repository, wherein the object includes attributes
21 and is used in an object-oriented programming application;
22 retrieving a list of persistent attributes from the object, wherein the
23 persistent attributes are a subset of the attributes and the persistent attributes
24 each comprise a persistent attribute value;
25 determining a path, wherein the path identifies a location in the
26 LDAP repository;
27 retrieving the persistent attribute values from the location in the
28 LDAP repository identified by the path; and
29 setting the persistent attributes in the object with the retrieved
30 persistent attribute values.
31
- 32 12. The method of claim 11, wherein retrieving the persistent attribute values
33 from the LDAP repository comprises invoking an LDAP read method and passing
34 the path with the read method invocation to the LDAP repository.

- 1 13. The method of claim 11, wherein the objects are Java objects.
- 2
- 3 14. The method of claim 11, wherein the object-oriented programming
- 4 application is implemented in Java and wherein Java reflection is used to implement
- 5 the setting step.
- 6
- 7 15. A computer readable medium containing instructions for mapping objects
- 8 onto a lightweight directory access protocol repository, by:
- 9 requesting that an object be stored in a lightweight directory access
- 10 protocol ("LDAP") repository, wherein the object includes attributes and is
- 11 used in an object-oriented programming application;
- 12 retrieving a list of persistent attributes from the object, wherein the
- 13 persistent attributes are a subset of the attributes and the persistent attributes
- 14 each comprise a persistent attribute value;
- 15 determining a path, wherein the path identifies a location in the
- 16 LDAP repository;
- 17 retrieving the persistent attribute values from the object; and
- 18 storing the object in the LDAP repository so that the persistent
- 19 attributes are stored in a format that is useable to applications other than the
- 20 object-oriented programming application.
- 21
- 22 16. The computer readable medium of claim 15, wherein storing the object in
- 23 the LDAP repository comprises:
- 24 mapping the persistent attributes to LDAP attributes;
- 25 passing the persistent attribute values to the LDAP repository;
- 26 storing the persistent attribute values in the LDAP attributes at the
- 27 path based on the mapping.
- 28
- 29 17. The computer readable medium of claim 15, wherein the objects are Java
- 30 objects.
- 31
- 32 18. The computer readable medium of claim 15, wherein the object-oriented
- 33 programming application is implemented in Java and the persistent attribute values
- 34 are retrieved from the object using Java reflection.

1
2 19. A computer system that supports mapping objects onto a lightweight
3 directory access protocol repository, comprising:
4 a lightweight directory access protocol ("LDAP") repository;
5 a processor that runs an object-orient programming application,
6 wherein the object-oriented programming application generates:
7 an object, wherein the object includes attributes and is used in
8 an object-oriented programming application;
9 a persistent data manager, that acts as a layer between the
10 object and the LDAP repository, wherein the persistent data manager
11 stores the object in the LDAP repository by:
12 retrieving a list of persistent attributes from the object,
13 wherein the persistent attributes are a subset of the attributes
14 and the persistent attributes each comprise a persistent
15 attribute value;
16 determining a path, wherein the path identifies a
17 location in the LDAP repository;
18 retrieving the persistent attribute values from the
19 object; and
20 storing the object in the LDAP repository so that the
21 persistent attributes are stored in a format that is useable to
22 applications other than the object-oriented programming
23 application.
24

25 20. The computer system of claim 19, wherein storing the object in the LDAP
26 repository comprises:
27 mapping the persistent attributes to LDAP attributes;
28 passing the persistent attribute values to the LDAP repository;
29 storing the persistent attribute values in the LDAP attributes at the
30 path based on the mapping.
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